

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	PS Docket No. 07-114
Wireless E911 Location Accuracy)	
Requirements)	
)	WC Docket No. 05-196
E911 Requirements for IP-Enabled Service)	
Providers)	

REPLY COMMENTS OF SPRINT NEXTEL CORPORATION

Sprint Nextel Corporation (“Sprint”) submits these Reply Comments in response to the Notice of Proposed Rulemaking and Notice of Inquiry issued in the above-referenced proceeding, which sought comment on a number of issues related to the Commission’s E9-1-1 location accuracy requirements.¹ As several commenters have discussed, a carrier’s ability to provide indoor location accuracy information is limited by current technology.² Sprint agrees with these commenters that there continue to be significant constraints on providing location data when indoors due to the limitations associated with existing location technologies. Due to these limitations, any effort to develop a separate indoor location accuracy standard will be a complex undertaking that will require a great deal of study and input from the industry. Sprint asserts it is not appropriate to adopt a separate indoor location accuracy standard and testing criteria at this time.

¹ E911 Location Accuracy Requirements, E911 Requirements for IP-Enabled Service Providers, PS Docket No. 07-114, WC Docket No. 05-196, *Further Notice of Proposed Rulemaking and Notice of Inquiry*, (rel. September 23, 2010) (“FNPRM and NOI”).

² T-Mobile Comments at 21, Verizon Comments at 8-9.

Some commenters have urged the Commission to take steps to adopt an indoor location accuracy standard.³ Sprint disagrees with the recommendation that a separate indoor location accuracy standard be established at this time. Importantly, carriers are now focused on meeting the requirements of the Second Report and Order and should not be distracted by shifting focus toward a separate indoor location accuracy standard. In addition, the record has not established that there are technology solutions both readily available and reasonable for carriers to deploy that could address the limitations of current technology, facilitate indoor testing, and allow for the creation of a separate location accuracy standard.

As Sprint and other commenters have explained, even solutions using hybrid technology have significant limitations indoors.⁴ In indoor environments, global positioning system (“GPS”) technologies are often unable to effectively acquire data from satellites and network technologies are constrained because signals from cell sites are often blocked by building materials. Radiofrequency (“RF”) multipathing is another problem that exists in indoor environments and affects location accuracy.⁵

Intrado argues that with current and foreseeable advances in technology, an indoor location standard is achievable.⁶ This position overstates the ability of current technology to provide indoor location information on a consistent basis. In the example provided in its comments, Intrado describes how femtocells could be used to provide location information.⁷ However, femtocell technology cannot be relied upon to supplement location accuracy at this stage. Femtocells are elective devices and, although

³ Intrado Comments at 3-4, True Position Comments at 25.

⁴ Sprint Comments at 7-8, T-Mobile Comments at 21-22, Verizon Comments at 8.

⁵ Sprint Comments at 7-8, T-Mobile Comments at 21-22.

⁶ Intrado Comments at 4.

⁷ Intrado Comments at 4.

they are gaining popularity, femtocell use is by no means ubiquitous and cannot be relied upon as the basis for crafting an indoor standard. The standard that Intrado proposes would require wireless carriers to provide a level of detail that is technologically infeasible for carriers at this time and in the foreseeable future without significant advances in technology.

It may be appropriate at a future date, after further study and as technology advances, to establish a separate standard for indoor location accuracy. Sprint agrees with Verizon that when a standard is developed, it should be based on the unique factors that affect indoor location accuracy.⁸ It would not be appropriate to apply the same standard that applies to traditional wireline carriers fielding 911 calls from indoor locations, as Intrado suggests.⁹

Indoor testing also presents significant challenges, and Sprint asserts it would be premature to mandate separate indoor testing requirements at this time. As T-Mobile and AT&T have noted, it is extremely difficult to perform indoor testing on a large scale because it is difficult to gain widespread access to indoor facilities.¹⁰ NENA has commented that it lacks sufficient quantitative data to recommend a specific percentage for indoor testing, although it has encouraged the Commission to give thoughtful consideration to APCO's proposal of 30%.¹¹ Sprint agrees there is insufficient data available to establish a specified level of indoor testing at this time. In addition, the technology for performing indoor testing is still in the process of being developed. Until the problems associated with indoor testing are addressed, it will not be feasible for

⁸ Verizon Comments at 9.

⁹ Intrado Comments at 3.

¹⁰ T-Mobile Comments at 22, AT&T Comments at 10.

¹¹ NENA Comments at 8.

carriers to separately measure indoor location accuracy and to meet a separate set of compliance criteria.

Sprint Nextel recognizes the valuable public safety objectives behind the Commission's location accuracy rules and applauds the Commission's efforts to develop the record further. As discussed in Sprint's Comments, however, Sprint urges the Commission to refrain from making significant changes to the rules at this time until the record is further developed. Consistent with this recommendation, Sprint urges the Commission to refrain from adopting a separate location accuracy standard for indoor environments and indoor testing criteria at this time.

Respectfully Submitted,

SPRINT NEXTEL CORPORATION

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